



625 Marion St. NE, Suite 1 Salem, OR 97301-3742 Phone: 503-378-4040 Toll Free: 1-800-221-8035 FAX: 503-373-7806 www.energy.state.or.us

March 4, 2003

Chris Smith
U.S. Department of Energy
Richland Operations Office
P.O. Box 550 (A3-04)
Richland, WA 99352



EDMC

Subject: Explanation of Significant Difference for the 100-NR-1 Operable Unit Treatment Storage and Disposal Interim Action Record of Decision and 100-NR-1/100-NR-2 Operable Unit Interim Action Record of Decision

Dear Mr. Smith:

The Oregon Office of Energy (Oregon) reviewed the above referenced document and provides the following conclusions and expectations for consideration during the finalization of this Explanation of Significant Difference and for future N-Area actions. We understand the U.S. Department of Energy (DOE) developed this Explanation of Significant Difference to provide a written record of its intent to formally change previously made cleanup decisions.

Oregon is uncertain as to DOE's clean up strategy for the 100-NR-1 and 2 Operable sites in the N-Area at Hanford. That causes us considerable concern. Oregon expects DOE to continue with the present interim action until a final clean up action has been selected for the entire N-Area. It is our expectation that the U.S. Department of Energy, Richland Office (DOE-RL) will develop a work plan to guide the technical and scientific studies necessary to characterize, assess and define clean up options for the N-Area. This open process, known as the Data Quality Objectives (DQO) process, should be completed prior to the creation of the comprehensive work plan.

The comprehensive work plan will guide the development of the Remedial Investigation and Feasibility Study for the N-Area (N-Area RI/FS). It is incumbent upon DOE-RL and its regulators to discuss the many studies that may be required for the N-Area RI/FS by using an open process that involves a wide range of stakeholders. An open process to **RECEIVED**

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establish the scope of these characterization studies, assessment of risk evaluations, and clean up options is necessary to develop a broadly supported partnership-driven remedial approach.

As part of the N-Area RI/FS, we expect that the proposed institutional controls will be reanalyzed based upon the selected clean up strategy, potential future site uses, and treaties preserving Native American rights. To credibly establish the protectiveness of the cleanup method chosen, Oregon expects that DOE-RL will conduct the necessary characterization, monitoring and ecological studies to support the draft comprehensive N-Area RI/FS. Characterization actions must include an evaluation of the highly variable geologic nature of the vadose and saturated zone, including contaminant movement. DOE should also characterize the ecological impacts of potential future actions on populations and individuals.

Monitoring of natural processes must be conducted to verify our understanding of the key environmental behaviors used to estimate risk to human health and the environment. Uncertainty associated with field measurements taken for the groundwater computer models should be presented along with estimated risks. The risk assessment must include residential and industrial scenarios, Native American scenarios, and agricultural scenarios based upon the surrounding Columbia Basin agribusiness practices.

Following the development of a clear, stakeholder supported analysis of potential future risks, DOE must present a thorough analysis of potential site clean up strategies. Oregon recommends that DOE evaluate excavation options, mining options, containment options, in-situ treatment options, ex-situ treatment options, passive options, and hydraulic controls, along with the required no further action evaluation. Oregon further expects that studies required to evaluate clean up options would be completed prior to presentation of the draft comprehensive N-Area RI/FS Report.

The clean up options analysis presented in the draft Explanation of Significant Difference lacks the necessary engineering rigor to develop a meaningful critique of the two excavation techniques presented. Options to remove the contaminated soils that will continue to degrade groundwater should be more critically developed. They should include clean up process logic, treatment and disposal options, utilize a common cost estimating basis, general project schedules and include conceptual design calculations, along with an evaluation of clean up effectiveness.

We support incorporating the N-Area annual reports with Hanford's sitewide annual institutional control reporting requirements. We also agree with DOE's recommendation suspending irrigation above contaminated site soils. However, the expectation that institutional controls will effectively protect human health and the environment for hundreds of years is not presently well founded. Such a conclusion must be developed as part of the comprehensive N-Area RI/FS report.

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Oregon looks forward to our continued participation in the Hanford Site remedial process and appreciates the opportunity to provide these comments. If you require clarification or have specific questions regarding the above points please contact Tom Stoops at (503) 378-8328.

Respectfully,

Ken Niles, Administrator Nuclear Safety Division

Cc: John Morse, U.S. Department of Energy, Richland Office

Jane Hedges, Washington State Department of Ecology

Nick Ceto, U.S. Environmental Protection Agency, Region 10

Shelley Cimon, Oregon Hanford Waste Board

Armond Minthorn, Confederated Tribes of the Umatilla Indian Reservation

Russell Jim, Yakama Nation Patrick Sobotta, Nez Perce Tribe

Thomas M. Stoops, Oregon Office of Energy